



Year 2004

Air Quality Division

ANNUAL AIR EMISSIONS INVENTORY QUESTIONNAIRE

For Facilities Permitted to Operate a Crematory

Instructions

The 2004 Annual Emissions Inventory Questionnaire includes 4 forms that are required to be completed and submitted to the Air Quality Division. Instructions for each form are included below. Upon completion, submit the forms along with the signature by the Responsible Official of the facility within 90 days of receipt of a letter from the Department.

FORM 1: Facility General Information

SECTION I thru III: Complete all fields as requested.

FORM 2: Equipment, Stack, & Process Data

- Table 1: List all equipment data including the dry cleaning unit and boiler, that operated at the facility. Include the Authorization To Operate (ATO) number for all the permitted equipment. Indicate, if not available.
- Table 2: Provide details of each stack.
- Table 3: Provide details on Cremation Processes.

FORM 3: Emissions Data

Based on the information provided in form 2 table 3, input the annual process rate in the incinerator's emissions table. Based on the fuel used (Liquefied Petroleum Gas or Natural Gas), choose the appropriate table to input the equipment heat input rate and hours of operation for your boiler. ***Once data is inputted the formulas are set to complete the calculations. Therefore, do not move or change any of the fields or columns.***

FORM 4: Summary & Certification

A summarization of all the emissions by each pollutant will be listed within this form. All reports submitted to the Department should be certified true and accurate by the Responsible Official of the facility. This person is the owner or operator of the facility. **If there is a change of the Responsible Official of the facility, please notify the Department with an additional letter stating so.**

The completed questionnaire should be submitted to the following address:

Arizona Department of Environmental Quality
Attention: Darlene Celaya, Emission Inventory Team
Air Quality Division, Compliance Section 3415A-3
1110 West Washington Street
Phoenix, AZ 85007

If you have any question or have difficulty completing this form, please contact Darlene Celaya at (602) 771-7662.

FORM 1: FACILITY GENERAL INFORMATION**YEAR 2004****SECTION I: *Plant Identification & Mailing Information***

Customer Name: _____

Place Name: _____ Place ID: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

County: _____

Phone: _____ Fax: _____

Permit Number: _____ General Permit: Yes No

SECTION II: *EI Contact*

EI Contact Name: _____ Title: _____

Telephone: _____ Fax: _____

SECTION III: *Confidential Request*

Pursuant to Arizona Revised Statutes §49-432 and §49-201, do you claim the Emissions Inventory data submittal confidential. If yes include which portions of the inventory are confidential along with a brief explanation:

Yes ☐
No ☐

FORM 2: EQUIPMENT, STACK, & PROCESS DATA
YEAR 2004
Table 1: Equipment List

	Equipment #1	Equipment #2
Equipment ID		
Equipment Description		
ATO#		
Design Capacity		
Emission Control Device		
Fuel Type Used		
Actual Hours Operated (hours/year)		

Table 2: Stack Information

	Stack #1	Stack #2
Height (feet)		
Diameter (feet)		
Velocity (feet/second)		
Exhaust Gas Temperature (F)		
Flow Rate (actual cubic feet per minute)		

Table 3: Process Data

Number of cremations	
Average # of hours per cremation cycle	
Total number of hours operated for the year 2004	
Average weight of cremation (pounds/year)	
Process Rate = (# of cremations) x (average weight of cremation) / 2000 pounds/ton	

FORM 3: EMISSIONS CALCULATION
YEAR 2004
INCINERATOR EMISSIONS

Source	(1) Process Rate tons/year	Pollutants	(2) Emission Factor pound/ton	Emissions = (1)x(2)/2000 tons/year
Incinerator		PM	4.67	
		PM-10	3.04	
		NOx	3.56	
		SOx	2.17	
		VOC	0.299	
		Pb	0.073	
		CO	2.95	

FUEL COMBUSTION IN INCINERATOR *Conversion Factor - MM = 1,000,000 M = 1,000*

NATURAL GAS				
Pollutants	(1) Max. Heat Input Rate MM Btu/hour	(2) Operational Hours hours/year	(3) Emission Factor pounds/MM Btu	Emissions = (1)x(2)x(3)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.00724	
Particulate Matter (PM)			0.00724	
Carbon Monoxide (CO)			0.08	
Volatile Organic Compounds (VOC)			0.00524	
Sulfur Oxides (SOx)			0.000571	
Nitrogen Oxides (NOx)			0.0952	

LIQUID PETROLEUM GAS				
Pollutants	(1) Max. Heat Input Rate MM Btu/hour	(2) Operational Hours hours/year	(3) Emission Factor pounds/MM Btu	Emissions = (1)x(2)x(3)/2000 tons/year
Particulate Matter <10 Microns (PM10)			0.00663	
Particulate Matter (PM)			0.00663	
Carbon Monoxide (CO)			0.0354	
Volatile Organic Compounds (VOC)			0.00331	
Nitrogen Oxides (NOx)			0.21	

FORM 4: SUMMARY & CERTIFICATION**YEAR 2004**

Total all the emissions for each pollutant and enter in the table below.

Pollutant	Tonnage (tons per year)
Particulate Matter (PM)	
Particulate Matter Less Than 10 Microns (PM10)	
Nitrogen Oxides (NOx)	
Sulfur Oxides (SOx)	
Volatile Organic Compounds (VOC)	
Carbon Monoxide (CO)	

Certification of Truth & Accuracy

I certify that I have knowledge of the facts set forth in this questionnaire, and that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Arizona Department of Environmental Quality as public record.

Signature of Responsible Official:

Date:

Print Name:

Title: